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(123)456-7890

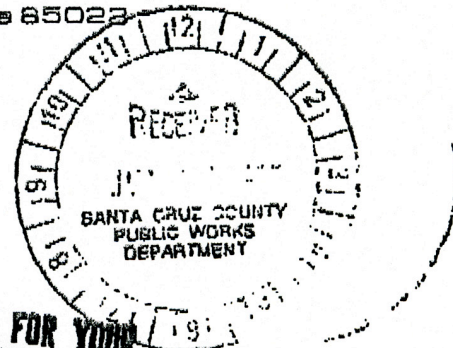
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July 13, 1995

Mr. Victor Gabilondo  
Santa Cruz County Public Works  
County Complex, Suite 117  
2150 North Congress Drive  
Nogales, AZ 85621

Subject: 1904 Historical Court House  
21 E. Court St., Nogales, AZ  
Leak Investigations



COPY FOR YOUR  
INFORMATION

Dear Mr. Gabilondo:

I performed watertest of roofing and gutter systems on July 11, 1995.

Jesse Spinoza informed me that the severe leak at the south east building corner only occurs during heavy rain storms.

The leader head is not large enough or properly designed to receive all of the water coming from the two gutters feeding it.

During heavy rains the water pours out the back of the leader head and spills down the stone wall behind. This stone wall has large areas of missing mortar and some of the stonework is split entirely through from exterior to interior. Water simply runs through the stone work and into the building.

I would approach the repair in two stages:

1. Join both gutters to the leader head using a primer, mastic and rubber sheet flashing. The sheet flashing must be installed to seal off the back of the leader head at building wall.
2. Tuck point all mortar joints and splits in stone work over an area approximately 4' wide by 6' vertically and directly behind the leader head and down spout.

There may still be some water coming through walls and window sills during heavy, wind blown rains. The downspout is too small at the bottom end to carry a full flow and water will back up and spill over the leader head and be blown against the wall. All stone work requires serious repair and tuck pointing.

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Other observations:

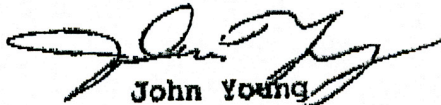
1. The metal roofing panels appear to be made from regular galvanized sheet metal. Evidence of rust on flat roof areas would indicate that the roofing metal does not have the current high tech primers and finishes found on typical metal roofing systems.
2. The standing seam covers have not been crimped or fastened in place and can be easily pulled off with the thumb and fore finger. Many have slid down and are "hanging" out over roofing edges. These all need some type of clip, crimp or rivet fastening.
3. The flat roof areas should have been sloped 1/4" per foot with rippers to provide some drainage. There is no acceptable closure at ends and edges of these areas so wind blown rain can easily siphon back under the edges and run down the underlayment sheet. If this sheet has any flaws the water will come through into building during these storms.
4. Gutter seams, gutter to parapet connections and flat metal eyebrow seams have been caulked and banded with various materials. Many seams have failed or are in some stage of failure. All need banding in an industry standard manner using strips of rubber sheet flashing.

The original fabrication and installation of metal roofing-gutter system was not done in accordance with industry standards. Caulking and patching on metal roofing installations is a temporary "fix" in lieu of proper installation techniques.

I would recommend that you have remedial work done properly by the installer and before the warranty expires.

Please call if you require clarification of this information.

Respectfully,

  
John Young